

## First Office Action

This invention relates to a light emitting device and production method thereof.

The Examiner is of the opinions as follows:

1. Claim 1 is rejected according to Article 22(3) of the Chinese Patent Law.

What is sought for protection in Claim 1 is a light emitting device. Reference 1 (JP P2000-221907A) discloses an electroluminescence means comprising: a thin film transistor TFT fabricated on an insulating base material; a luminous section provided on the TFT, including a luminous material layer and electrode layers supplying current to the luminous material layer (see paragraph 0013, column 3, paragraph 0028, column 5, and figure 2). It can be seen that Reference 1 has already disclosed part of technical features of Claim 1; and Claim 1 differs from Reference 1 in that:

*a predetermined pattern having a plurality of openings is developed to the insulating base material or at least one material placed above the insulating base material and below the luminous material layer.*

Reference 2 (JP Hei 5- 21158) discloses a light emitting element. There is a plurality of openings on a substrate of the light emitting element to form a predetermined pattern, which has a function of reducing the rays trapped within the light emitting device and increasing the luminous efficiency. Thus, the differential technical features between Claim 1 and Reference 1 have already been disclosed in Reference 2, and have the same effects. As it can be seen, those skilled in the art can obtain the technical teaching from Reference 2 for applying the above differential technical features into the technical solutions of Reference 1 to solve the particular technical problems, that is, it is apparent to obtain the technical solution of Claim 1 as combining Reference 1 with Reference 2. Consequently, with respect to References 1 and 2, the technical solution for which protections are sought in Claim 1 is lack of inventiveness specified in Article 22(3) of the Chinese Patent Law.

Reference 3 (JP P2000-77181A) discloses an EL element. There is a plurality of openings on a transparent electrode layer provided between a substrate and the luminous material to form a predetermined pattern, which prevent the rays from being trapped within the EL element (see columns 4 – 5, and figure 1). Thus, the differential technical features between Claim 1 and Reference 1 have already been disclosed in Reference 3, and have the same effects. Similarly, with respect to References 1 and 3, the technical solution for which protections are sought in Claim 1 is lack of inventiveness specified in Article 22(3) of the Chinese Patent Law.

Reference 4 (JP P2000-268978A) discloses an organic EL element. There is a plurality of openings on a transparent electrode layer provided between a substrate

and the luminous material to form a predetermined pattern, which prevent the rays from being trapped within the EL element (see column 5, and figure 1). Thus, the differential technical features between Claim 1 and Reference 1 have already been disclosed in Reference 4, and have the same effects. Similarly, with respect to References 1 and 4, the technical solution for which protections are sought in Claim 1 is lack of inventiveness specified in Article 22(3) of the Chinese Patent Law.

***Article 22(3) of the Chinese Patent Law: Inventiveness means that, as compared with the technology existing before the date of filing, the invention has prominent substantive features and represents a notable progress and that the utility model has substantive features and represents progress.***

2. Claim 2 is rejected according to Article 22(2) of the Chinese Patent Law.

What is sought for protection in Claim 2 is a light emitting device. Reference 3 discloses a light emitting device, comprising a transparent electrode 3 provided on a insulating substrate for supplying current to a luminous material layer (corresponding to a first electrode in Claim 2); a luminous layer 4 for emitting light by supplying current thereto; an opposite electrode 5 for supplying the current to the luminous layer (corresponding to a second electrode in Claim 2). There is a plurality of openings on said transparent electrode, so that concavities and convexities are formed to the luminous layer and the opposite electrode layer (see column 5, and figure 1(b)). As it can be seen, Reference 3 has already disclosed all the technical features of Claim 2. And Reference 3 and Claim 2 belong to the same technical field, the technical solutions thereof are identical, and the technical problems to be solved and the technical effects are all the same. Consequently, with respect to Reference 3, Claim 2 is lack of novelty specified in Article 22(2) of the Chinese Patent Law.

Meanwhile, Reference 4 has already disclosed all the technical features of Claim 2 (see, columns 4 – 5, and figure 1). Consequently, with respect to Reference 4, Claim 2 is lack of novelty specified in Article 22(2) of the Chinese Patent Law.

***Article 22(2) of the Chinese Patent Law: Novelty means that, before the date of filing, no identical invention or utility model has been publicly disclosed in publications in the country or abroad or has been publicly used or made known to the public by any other means in the country, nor has any other person filed previously with the Chinese Administration Department under the State Council an application which described the identical invention or utility model and was published after the said date of filing.***

3. Claim 3 is rejected according to Article 22(2) of the Chinese Patent Law.

What is sought for protection in Claim 3 is a light emitting device, the technical solution of which is substantially same as that of Claim 2. As commented above,

Claim 2 is lack of novelty, and the technical feature of “the electrode layer made of the transparent material has a comb shape in plane view” has also been disclosed in Reference 3 (see Figure 9(b)). Consequently, Claim 3 is lack of novelty specified in Article 22(2) of the Chinese Patent Law.

4. Claim 4 is rejected according to Article 22(3) of the Chinese Patent Law.

What is sought for protection in Claim 4 is a light emitting device. Reference 1 discloses an electroluminescence means comprising: a thin film transistor TFT fabricated on an insulating base material; an insulating layer 17, an anode 61 to supply current to a luminous layer 64 (corresponding to a first electrode in Claim 4), the luminous layer emitting light by supplying current thereto, and a cathode 66 to supply current to said luminous layer (corresponding to a second electrode in Claim 4); wherein said anode is made of an ITO transparent material, and said cathode is made of a reflecting material of magnesium alloy and indium alloy (see paragraph 0013, column 3, paragraph 0028, column 5, and figure 2). It can be seen that Reference 1 has already disclosed a majority of technical features of Claim 4; and Claim 4 differs from Reference 1 in that:

*a predetermined pattern having a plurality of opening is formed to the insulating base material or at least one material placed above the insulating base material and below the luminous material layer; the first electrode layer is formed on convex sections of the insulating layer formed owing to the plurality of opening.*

Reference 2 discloses a light emitting element. There is a plurality of openings on an insulating substrate or a resin film 9 (corresponding to the insulating layer in Claim 4) between the insulating substrate and a luminous layer of the light emitting element (see paragraph 0009, column 2 to paragraph 0014, column 4, figures 1 and 3); and a strip metal electrode 4 (corresponding to the first electrode in Claim 4) is formed to the convexities of the resin film 9 having a plurality of openings (see paragraph 0013, column 4, figure 3). The functions of the above technical features are to reduce the rays trapped within the light emitting device and to increase the luminous efficiency. Thus, the differential technical features between Claim 4 and Reference 1 have already been disclosed in Reference 2, and have the same effects. As it can be seen, those skilled in the art can obtain the technical teaching from Reference 2 for applying the above differential technical features into the technical solutions of Reference 1 to solve the particular technical problems, that is, it is apparent to obtain the technical solution of Claim 4 as combining Reference 1 with Reference 2. Consequently, with respect to References 1 and 2, the technical solution for which protections are sought in Claim 4 is lack of inventiveness specified in Article 22(3) of the Chinese Patent Law.

5. Claim 5 is rejected according to Article 22(3) of the Chinese Patent Law.

What is sought for protection in Claim 5 is a light emitting device, which is different from Claim 4 only in that: the second electrode layer is formed on concave sections of the luminous material layer formed owing to the plurality of opening. Reference 2 has also disclosed that: a single electrode 8 (corresponding to the second electrode in Claim 5) is formed on the concavities of the luminous layer formed owing to the plurality of openings (see figures 1 and 3); and a insulating layer 7 existing between the single electrode and the luminous layer. According to those contents, when the light emitting device is driven by using TFT, it makes a reflecting electrode be directly formed on the concavities of the luminous layer, which is a technical solution obtained those skilled in the art without paying inventive efforts. As commented above, Claim 4 is lack of inventiveness. Therefore, with respect to References 1 and 2, Claim 5 does not have prominent substantive features and does not represent a notable progress, and thus does not comply with the requirements of Article 22(3) of the Chinese Patent Law.

6. Claims 6 and 8 – 10 are rejected according to Article 22(3) of the Chinese Patent Law, and Claim 7 is rejected according to Article 22(2) of the Chinese Patent Law.

Claims 6 – 10 further limit that the luminous material is made of organic or inorganic material on the basis of Claims 1 – 5 respectively, whereas this additional technical solution has already been disclosed in the prior art, for example, Reference 1 (see paragraph 0013, column 3) and Reference 4 (see paragraph 0044, column 9) disclose that the luminous layer is made of organic material; and Reference 2 (see paragraph 0012, column 4) and Reference 3 (see paragraph 0023, column 5) disclose that the luminous layer is made of inorganic material. Consequently, when Claims 1 – 5 to which are referred by Claims 6 – 10 are lack of novelty or inventiveness, Claims 6 and 8 – 10 are lack of inventiveness specified in Article 22(3) of the Chinese Patent Law, and Claim 7 is lack of novelty specified in Article 22(2) of the Chinese Patent Law.

7. Claims 11 and 12 are rejected according to Article 22(3) of the Chinese Patent Law.

Claims 11 and 12 makes further limits on the basis of Claims 2 and 3 respectively. Reference 2 has already disclosed the following technical features: the luminous material is made of inorganic materials; and a first insulating layer 5 is formed between the luminous material and the single electrode (corresponding to the first electrode in Claim 11)(see paragraph 0012, column 4, and figure 1). Thus, the additional technical features of Claims 11 and 12 have already been disclosed in Reference 2, and have the same effects. As it can be seen, Reference 2 has already given the technical teaching for applying the above additional technical features into the technical solutions of Claims 2 and 3 to solve the its technical problems, that is, it is apparent to obtain the technical solution of Claim 11 or 12 on the basis of

Reference 3 or 4 and combining with Reference 2. Consequently, when Claim 2 which is referred to by Claim 11 is lack of novelty with respect to Reference 3 or 4, Claim 11 is lack of inventiveness specified in Article 22(3) of the Chinese Patent Law with respect to References 3 and 2 or References 4 and 2. And Claim 12 is lack of novelty specified in Article 22(2) of the Chinese Patent Law with respect to References 3 and 2.

8. Claims 13 and 14 are rejected according to Article 22(3) of the Chinese Patent Law.

Claims 13 and 14 makes further limits on the basis of 4 and 5 respectively. As described above, the technical contents of using inorganic materials to make the luminous layer and providing the insulating layer between the electrode and luminous layer have already been disclosed in Reference 2. Consequently, when Claims 4 and 5 to which is referred by Claims 13 and 14 respectively are lack of inventiveness, Claims 13 and 14 are lack of inventiveness specified in Article 22(3) of the Chinese Patent Law.

9. Claims 15 – 19 is rejected according to Article 22(3) of the Chinese Patent Law.

What are sought for protection in Claims 15 – 19 are production methods of light emitting devices. The methods correspond to the light emitting devices of Claims 1 – 5 respectively. Above, it has already pointed out that Claims 1 – 5 are lack of novelty or inventiveness. And Claims 15 – 19 include only the general forming steps of the light emitting devices, but do not include the particular means for implementing said steps, and thus the technical contents thereof are still the light emitting devices themselves. Also, the forming steps are a technical solution obtained by those skilled in the art in the condition of considering the structural characteristics of the light emitting devices and combining the common design abilities thereof. Consequently, the technical solutions for which protections are sought in Claims 15 – 19 do not have prominent substantive features and do not represent a notable progress, and thus do not comply with the requirements of Article 22(3) of the Chinese Patent Law.

Due to the reasons mentioned above, this application could not be granted a patent at present. The applicant should submit the amended claims and should make a corresponding amendment to the summary of the description. The applicant should overcome all the defects mentioned above. If the applicant could not propose the convictive reasons on the due date and do not make modification on its application document, or it still contains above defects after the modification, the application would be rejected. Moreover, it should be noted that the amendment to the application may not go beyond the scope of the disclosure contained in the initial description and claims. Otherwise, the application would be rejected.

# State Intellectual Property Office of People's Republic of China

Add: 16/F, Zhongke Building, No. 80, Haidian Road, Haidian District, Beijing, P.R. China Postal Code: 100080

Applicant(s)	NEC Corporation	Issuing Date: April 2, 2004
Patent Agent(s)	Jingui ZHU	
Application No.	01144884.9	
Title of Invention	LIGHT EMITTING DEVICE AND PRODUCTION METHOD THEREOF	

## THE FIRST OFFICE ACTION

1. ☒ The applicant has filed a request for substantive examination on \_\_\_\_\_ (day/month/year). The examiner has proceeded the substantive examination on the above mentioned patent application for invention in accordance with the provisions of Article 35(1) of the Chinese Patent Law.
- ☐ The Patent Office has decided to proceed a substantive examination on the above mentioned patent application for invention in accordance with the provisions of Article 35(2) of the Chinese Patent Law.
2. ☒ The applicant claimed:
- the filing date 2000.12.28 in the Japan Patent Office as the priority date,
- the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date,
- the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date,
- the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date,
- the filing date \_\_\_\_\_ in the \_\_\_\_\_ Patent Office as the priority date.
- ☒ The applicant has provided a copy of the priority documents certified by the Patent Office where the prior application(s) was/were filed.
- ☐ The applicant has not provided a copy of the priority documents certified by the Patent Office where the prior application(s) was/were filed and the priority claim(s) is/are deemed not to have been made in accordance with the provisions of Article 30 of the Chinese Patent Law.
3. ☐ The applicant submitted amendment (s) to the application on \_\_\_\_\_ and on \_\_\_\_\_, wherein the amendment (s) submitted on \_\_\_\_\_ and \_\_\_\_\_ on \_\_\_\_\_ are unacceptable, because said amendment(s) is/are not in conformity with
- ☐ the provisions of Article 33 of the Chinese Patent Law:
- ☐ the provisions of Rule 51 of the Implementing Regulations of the Chinese Patent Law.
- The detailed reasons for the amendments being unacceptable is described in the text of this Office Action.
4. ☒ The examination is proceeded based on the application documents originally filed.
- ☐ Description:
- Pages \_\_\_\_\_ of original application documents filed on the application date,
- Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;
- Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

☐ Claims:

Pages \_\_\_\_\_ of original application documents filed on the application date,

Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

☐ Drawings:

Pages \_\_\_\_\_ of original application documents filed on the application date,

Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

Pages \_\_\_\_\_ filed on; Pages \_\_\_\_\_ filed on;

☐ Abstract: ☐ Filed on the application date; ☐ filed on \_\_\_\_\_

☐ Drawing to the Abstract: ☐ Filed on the application date; ☐ filed on \_\_\_\_\_

5. ☐ This Notification is issued without a search having been conducted.

☒ This Notification is issued with a search having been conducted.

☒ The following reference documents have been cited in this office action (their serial numbers will be referred to in the ensuing examination procedure):

Serial No.	Reference document( Number or Title)	Publication Date (or Filing date of interference patent applications)
1	JP2000-221907 A	11day 08 month 2000 year
2	JP5-21158 A ✓	29day 01 month 1993 year
3	JP2000-77181 A ✓	14day 03 month 2000 year
4	JP2000-268978 A	29day 09 month 2000 year

6. The conclusive opinion of the examiner is as follows:

☐ Description:

☐ The subject matter of the application falls into the scope, on which no patent right shall be granted, defined by Article 5 of the Chinese Patent Law.

☐ The description is not in conformity with the provisions of Article 26(3) of the Chinese Patent Law.

☐ The description is not in conformity with the provisions of Rule 18 of the Implementing Regulations of the Chinese Patent Law.

☒ Claims:

☐ Claim \_\_\_\_\_ falls into the scope, on which no granted patent right shall be granted, provided by Article 25 of the Chinese Patent Law.

☐ Claim \_\_\_\_\_ is not in conformity with the definition of invention prescribed by Rule 2(1) of the Implementing Regulations of the Chinese Patent Law.

☒ Claim 2,3,7 does not possess novelty provided by Article 22(2) of the Chinese Patent Law.

☒ Claim 1,4-6,8-19 does not possess inventiveness provided by Article 22(3) of the Chinese Patent Law.

- ☐ Claim \_\_\_\_\_ does not possess practical applicability provided by Article 22(4) of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Article 26(4) of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Article 31(1) of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Rule 20 to 23 of the Implementing Regulations of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Article 9 of the Chinese Patent Law.
- ☐ Claim \_\_\_\_\_ is not in conformity with the provisions of Rule 12(1) of the Implementing Regulations of the Chinese Patent Law.

The detailed analysis for above conclusive opinion is described in the text of this office action.

7. On the basis of the above conclusive opinion, the examiner holds that:

- ☐ The applicant should make amendment in accordance with the requirements described in the text of this office action.
- ☐ The applicant should expound reasons for that the above mentioned patent application can be granted patent right, and make amendments to the specification which is not in conformity with the provisions as described in the text of this office action; otherwise the patent right shall not be granted.
- ☒ The patent application does not possess any substantive contents for which patent right may be granted, if the applicant fails to expound reasons or the reasons expounded are not sufficient, this application will be rejected.
- ☐

8. The applicant shall pay attention to the following matters:

- (1) In accordance with the provisions of Article 37 of the Chinese Patent Law, the applicant shall submit a response within four months from the date of receiving this office action. If the applicant fails to meet the time limit without any justified reason, the application shall be deemed to have been withdrawn.
- (2) The amendment made by the applicant shall be in conformity with the provisions of Article 33 of the Chinese Patent Law. The amendment shall be submitted in duplicate copies and in a format which is in accordance with the relevant provisions of the Examination Manual.
- (3) The applicant's response and/or amended documents shall be mailed or submitted to the Receiving Department of the Chinese Patent Office. The documents which are not mailed or submitted to the Receiving Department do not possess legal effect.
- (4) The applicant and/or his(its) agent shall not come to the Chinese Patent Office to interview with the examiner without an appointment.

9. The text of this office action consists of a total of 4 sheets, and is accompanied by the following annexes:



- ☒ A copy of the cited reference documents consisting of 4 sets and 29 sheets.
- ☐ The \_\_\_\_\_ Examination Department

The Seal of the Examiner: Xiaolin ZHU





# 中华人民共和国国家知识产权局

邮政编码: 100083 北京市海淀区王庄路1号清华同方科技大厦B座15层 中科专利商标代理有限公司 朱进桂		发文日期 
申请号: 011448849 		
申请人: 日本电气株式会社		
发明创造名称: 发光器件及其生产方法		

## 第一次审查意见通知书

1. ☒ 应申请人提出的实审请求, 根据专利法第 35 条第 1 款的规定, 国家知识产权局对上述发明专利申请进行实质审查。

☐ 根据专利法第 35 条第 2 款的规定, 国家知识产权局决定自行对上述发明专利申请进行审查。

2. ☒ 申请人要求以在:

JP 专利局的申请日 2000 年 12 月 28 日为优先权日,  
专利局的申请日 年 月 日为优先权日,  
专利局的申请日 年 月 日为优先权日,  
专利局的申请日 年 月 日为优先权日,  
专利局的申请日 年 月 日为优先权日。

☒ 申请人已经提交了经原申请国受理机关证明的第一次提出的在先申请文件的副本。

☐ 申请人尚未提交经原申请国受理机关证明的第一次提出的在先申请文件的副本, 根据专利法第 30 条的规定视为未提出优先权要求。

3. ☐ 申请人于 年 月 日和 年 月 日提交了修改文件。  
经审查, 申请人于: 年 月 日提交的 不符合实施细则第 51 条的规定;  
年 月 日提交的 不符合专利法第 33 条的规定;

4. 审查针对的申请文件:

☒ 原始申请文件。 ☐ 审查是针对下述申请文件的

申请日提交的原始申请文件的权利要求第	项、说明书第	页、附图第	页;
年 月 日提交的权利要求第	项、说明书第	页、附图第	页;
年 月 日提交的权利要求第	项、说明书第	页、附图第	页;
年 月 日提交的权利要求第	项、说明书第	页、附图第	页;
年 月 日提交的说明书摘要,	年 月	日提交的摘要附图。	

5. ☐ 本通知书是在未进行检索的情况下作出的。

☒ 本通知书是在进行了检索的情况下作出的。

☒ 本通知书引用下述对比文献(其编号在今后的审查过程中继续沿用):

编号	文件号或名称	公开日期 (或抵触申请的申请日)
----	--------	------------------

1	JP2000-221907 A	2000. 8. 11
2	JP5-21158 A	1993. 1. 29
3	JP2000-77181 A	2000. 3. 14
4	JP2000-268978 A	2000. 9. 29

6. 审查的结论性意见:

21301  
2002. 8



回函请寄: 100088 北京市海淀区蓟门桥西土城路6号 国家知识产权局专利局受理处收  
(注: 凡寄给审查员个人的信函不具有法律效力)

☐关于说明书:

- ☐申请的内容属于专利法第 5 条规定的不授予专利权的范围。
- ☐说明书不符合专利法第 26 条第 3 款的规定。
- ☐说明书不符合专利法第 33 条的规定。
- ☐说明书的撰写不符合实施细则第 18 条的规定。

☒关于权利要求书:

- ☒权利要求 2, 3, 7 不具备专利法第 22 条第 2 款规定的新颖性。
- ☒权利要求 1, 4-6, 8-19 不具备专利法第 22 条第 3 款规定的创造性。
- ☐权利要求 不具备专利法第 22 条第 4 款规定的实用性。
- ☐权利要求 属于专利法第 25 条规定的不授予专利权的范围。
- ☐权利要求 不符合专利法第 26 条第 4 款的规定。
- ☐权利要求 不符合专利法第 31 条第 1 款的规定。
- ☐权利要求 不符合专利法第 33 条的规定。
- ☐权利要求 不符合专利法实施细则第 2 条第 1 款关于发明的定义。
- ☐权利要求 不符合专利法实施细则第 13 条第 1 款的规定。
- ☐权利要求 不符合专利法实施细则第 20 条的规定。
- ☐权利要求 不符合专利法实施细则第 21 条的规定。
- ☐权利要求 不符合专利法实施细则第 22 条的规定。
- ☐权利要求 不符合专利法实施细则第 23 条的规定。

上述结论性意见的具体分析见本通知书的正文部分。

7. 基于上述结论性意见, 审查员认为:

- ☐申请人应按照通知书正文部分提出的要求, 对申请文件进行修改。
- ☐申请人应在意见陈述书中论述其专利申请可以被授予专利权的理由, 并对通知书正文部分中指出的不符合规定之处进行修改, 否则将不能授予专利权。
- ☒专利申请中没有可以被授予专利权的实质性内容, 如果申请人没有陈述理由或者陈述理由不充分, 其申请将被驳回。

☐

8. 申请人应注意下述事项:

- (1) 根据专利法第 37 条的规定, 申请人应在收到本通知书之日起的肆个月内陈述意见, 如果申请人无正当理由逾期不答复, 其申请将被视为撤回。
- (2) 申请人对其申请的修改应符合专利法第 33 条的规定, 修改文本应一式两份, 其格式应符合审查指南的有关规定。
- (3) 申请人的意见陈述书和/或修改文本应邮寄或递交国家知识产权局专利局受理处, 凡未邮寄或递交给受理处的文件不具备法律效力。
- (4) 未经预约, 申请人和/或代理人不得前来国家知识产权局专利局与审查员举行会晤。

9. 本通知书正文部分共有 4 页, 并附有下列附件:

- ☒引用的对比文件的复印件共 4 份 29 页。 ☐

审查员: 朱晓琳

2004 年 3 月 4 日



审查部门 审查协作中心

21301  
2002.8



回函请寄: 100088 北京市海淀区蓟门桥西土城路 6 号 国家知识产权局专利局受理处收  
(注: 凡寄给审查员个人的信函不具有法律效力)

# 第一次审查意见通知书正文

申请号：01144884.9

本发明专利申请涉及一种发光器件及其生产方法。经审查，提出如下审查意见。

1. 独立权利要求 1 请求保护一种发光器件。对比文件 1 公开了一种电致发光装置，该装置包括在绝缘基材上制作的薄膜晶体管 TFT；在该 TFT 上设置有电致发光部分，该发光部分具有发光材料层和向该发光材料层提供电流的的电极（参见说明书第 3 栏第 0013 段、第 5 栏第 0028 段，附图 2）。可见，对比文件 1 已披露了权利要求 1 的部分技术特征；权利要求 1 相对于对比文件 1 的区别在于：

被成图于该绝缘基材或者是位于该绝缘基材上和该发光材料层之下的至少一种材料上的具有多个开口的一预定的图案。

对比文件 2 公开了一种发光元件，在该发光元件的绝缘基板上具有多个开口以形成一预定图案（参见说明书第 2 栏第 0009 段至第 4 栏第 0014 段，附图 1-3），其作用为减少被封闭于发光器件中的光线、提高发光效率。可见，权利要求 1 相对于对比文件 1 的区别技术特征已被对比文件 2 所披露，且所起作用相同。由此可以认为，本领域普通技术人员能够从对比文件 2 中得到将上述区别技术特征应用到对比文件 1 的技术方案中以解决其具体技术问题的技术启示；即在对比文件 1 的基础上结合对比文件 2 而得到权利要求 1 所述的技术方案是显而易见的。因此，独立权利要求 1 请求保护的技术方案相对于对比文件 1、2 不具有专利法第二十二条第三款规定的创造性。

对比文件 3 公开了一种 EL 元件，在该 EL 元件的绝缘基板上以及设置于基板与发光材料之间的透明电极层上均具有多个开口，以形成预定的图案，防止光线被封闭在 EL 元件内（参见说明书第 4-5 栏，附图 1）。可见，权利要求 1 相对于对比文件 1 的区别技术特征也已被对比文件 3 所披露，且所起作用相同。基于与上述相同的理由，权利要求 1 请求保护的技术方案相对于对比文件 1、3 也不具有专利法第二十二条第三款规定的创造性。

对比文件 4 公开了一种有机 EL 元件，在该 EL 元件的设置于基板与发光材料之间的透明电极层上具有多个开口，以形成预定的图案，防止光线被封闭在 EL 元件内（参见说明书第 5 栏，附图 1）。可见，权利要求 1 相对于对比文件 1 的区别技术特征也已被对比文件 4 所披露，且所起作用相同。基于与上述相同的理由，权利要求 1 请求保护的技术方案相对于对比文件 1、4 也不具有专利法第二十二条第三款规定的创造性。

2. 独立权利要求 2 请求保护一种发光器件。对比文件 3 公开了一种发光器件，该器件包括设置在一个绝缘基板上的向发光材料层提供电流的透明电极 3（相当于权利要求 2 的第一电极），利用所提供的电流发光的发光层 4，向该发光层提供电流的反向电极 5（相当于权利要求 2 的第二电极）。在所述透明电极上具有多个开口，由于该多个开口，使所述发光层和反向电极层形成凹面和凸面（参见说明书第 5 栏，附图 1（b））。可见，对比文件 3 已披露了权利要求 2 的全部技术特征。权利要求 2 请求保护的技术方案与对比文件 1 所属技术领域相同，所要解决的技术问题相同，采用了相同的技术手段，构成同样的发明。因此，权利要求 2 请求保护的技术方案相对于对比文件 3 不具有专利法第二十二条第二款规定的新颖性。

对比文件 4 公开了一种有机薄膜 EL 元件，其中（参见说明书第 4-5 栏，附图 1）也披露了权利要求 2 的全部技术特征，因而权利要求 2 相对于对比文件 4 也不具有专利法第二十二条第二款规定的新颖性。

3. 独立权利要求 3 请求保护一种发光器件，其技术方案与权利要求 2 实质相同，而前面已评述权利要求 2 不具有新颖性；至于“用透明材料制成的电极层具有梳齿状”的技术特征，也已在对比文件 3 中披露（参见附图 9（b））。因此，权利要求 3 请求保护的技术方案也不具有专利法第二十二条第二款规定的新颖性。

4. 独立权利要求 4 请求保护一种发光器件。对比文件 1 公开了一种电致发光装置，该装置包括在绝缘基材上制作的薄膜晶体管 TFT；在该 TFT 上堆叠的一个绝缘层 17、向发光层 64 提供电流的阳极 61（相当于权利要求 4 的第一电极）、利用所提供的电流发光的发光层 64，以及向所述发光层提供电流的阴极 66（相当于权利要求 4 的第二电极）；所述阳极为由 ITO 透明材料制成，所述阴极由镁合金、铟合金的反光材料制成（参见说明书第 3 栏第 0013 段、第 5 栏第 0028、0034 段，附图 2）。可见，对比文件 1 已披露了权利要求 4 的大部分技术特征；权利要求 4 相对于对比文件 1 的区别在于：

被成图于该绝缘基材或者是位于该绝缘基材上和该发光材料层之下的至少一种材料上的具有多个开口的一预定的图案；第一电极层是形成于由于多个开口而形成的所述绝缘层的凸面上。

对比文件 2 公开了一种发光元件，在该发光元件的绝缘基板上或位于绝缘基板和发光层之间的树脂膜 9（相当于权利要求 4 的绝缘层）上具有多个开口以形成一预定图案（参见说明书第 2 栏第 0009 段至第 4 栏第 0014 段，附图 1、3）；带状金属电极 4（相当于权利要求 4 的第一电极）形成于具有多个开口的绝缘树脂膜 9 的凸面上（参见说明书第 4 栏第 0013 段，附图 3；上述技术特征的作用为减少被封闭于发光器件中的光线、提高发光效率。可见，权利要求 4 相对于对比文件 1 的区别技术特征已被对比文件 2 所披露，且所起作用相同。

由此可以认为，本领域普通技术人员能够从对比文件 2 中得到将上述区别技术特征应用到对比文件 1 的技术方案中以解决其具体技术问题的技术启示；即在对比文件 1 的基础上结合对比文件 2 而得到权利要求 4 所述的技术方案是显而易见的。因此，独立权利要求 4 请求保护的技术方案相对于对比文件 1、2 不具有专利法第二十二条第三款规定的创造性。

5. 独立权利要求 5 请求保护一种发光器件，其相对于权利要求 4 的区别在于：第二电极层形成于由于多个开口而形成的发光材料层的凹面上。对比文件 2 还披露：单个电极 8（相当于权利要求 5 的第二电极）形成于多个开口形成的发光层的凹面上（参见附图 1、3），在单个电极与发光层之间有绝缘层 7。根据该内容，当采用 TFT 驱动发光元件时，使反射电极直接形成于发光层的凹面上，这是本领域技术人员不需要付出创造性劳动即可得到的技术方案；前面已评述权利要求 4 不具有创造性；因此，独立权利要求 5 相对于对比文件 1、2 也不具有突出的实质性特点和进步，不符合专利法第二十二条第三款规定的创造性。

6. 权利要求 6-10 分别在权利要求 1-5 的基础上限定发光材料是由有机或无机材料制成，该附加技术特征也已被已有技术公开，如对比文件 1（参见说明书第 3 栏第 0013 段）、对比文件 4（参见说明书第 9 栏第 0044 段）披露由有机材料制成发光层；对比文件 2（参见说明书第 4 栏第 0012 段）、对比文件 3（参见说明书第 5 栏第 0023 段）披露了由无机材料制成发光层。因此，当其引用的权利要求 1-5 不具有新颖性或创造性时，权利要求 6、8-10 不具有专利法第二十二条第三款规定的创造性，权利要求 7 不具有专利法第二十二条第二款规定的新颖性。

7. 权利要求 11、12 分别在权利要求 2、3 的基础上作了进一步限定。对比文件 2 披露了下述技术特征：发光材料用无机材料制成，第一绝缘层 5 形成于发光材料与金属带电极（相当于权利要求 11 的第一电极）之间，第二绝缘层 7 形成于发光材料层与单个电极（相当于权利要求 11 的第二电极）之间（参见说明书第 4 栏第 0012 段，附图 1）。可见，权利要求 11、12 的附加技术特征已被对比文件 2 所披露，且所起作用相同。由此可以认为，对比文件 2 给出了将上述附加技术特征应用到权利要求 2、3 的技术方案中以进一步解决其技术问题的启示，即在对比文件 3 或 4 的基础上结合对比文件 2 而得到权利要求 11、12 请求保护的技术方案是显而易见的。因此，当其引用的权利要求 2 相对于对比文件 3 或 4 不具有新颖性时，权利要求 11 相对于对比文件 3、2 或对比文件 4、2 不具有专利法第二十二条第三款规定的创造性，权利要求 12 相对于对比文件 3、2 不具有专利法第二十二条第三款规定的创造性。

8. 权利要求 14、15 分别在权利要求 4、5 的基础上作了进一步限定。如前所述，采用无机材料制成发光层、在电极与发光层之间设置绝缘层的技术内容

已被对比文件 2 所披露。因此，当其引用的权利要求 4、5 不具有创造性时，权利要求 14、15 也不具有专利法第二十二条第三款规定的创造性。

9. 权利要求 15-19 分别请求保护一种发光器件的生产方法，所述方法分别对应于权利要求 1-5 的发光器件，前面已评述权利要求 1-5 不具有新颖性或创造性；而权利要求 15-19 只包括了所述发光器件一般形成步骤，没有包括实施所述步骤的具体手段，其技术内容的实质仍然是发光器件本身，并且，所述的形成步骤也是本领域技术人员根据发光器件的结构特点结合其常规设计能力即可得到的技术方案。因此，权利要求 15-19 请求保护的技术方案不具有突出的实质性特点和显著的进步，不符合专利法第二十二条第三款规定的创造性。

综上所述，本发明专利申请的权利要求 1-19 均不符合专利法规定的新颖性或创造性条件，说明书中也没有发现可以授权的实质性内容。如果申请人不能在本通知指定的四个月答复期限内陈述其专利申请具有创造性的理由或陈述理由不充分，则本申请将被驳回。